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| 1. **Training Product Details** | | | |
| **Course Code** | ICT40115 | **Course Title** | Certificate IV in IT (Programming) |

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| 1. **Cluster Unit Details (optional)** | |
| **Cluster Title** | CL\_INTROPROG001 Introduction to programming |

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|  | **National Unit Code** | **National Unit Title** | **Nominal Hours** | **Start Date** | **End Date** |
| **A** | ICTICT406 | Build a graphical user interface | 20 |  |  |
| **B** | ICTPRG301 | Apply introductory programming techniques | 40 |  |  |
| **C** | ICTPRG404 | Test applications | 50 |  |  |
| **D** |  |  |  |  |  |
| **E** |  |  |  |  |  |

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| 1. **Group Details** | | | | | | |
| **Group Name** |  | | **Group Title** | |  | |
| **Day (s)** | | **Start Time (s)** | | **Finish Time (s)** | | **Room** |
| Wednesday | | 1:30 | | 5:30 | | TC208 |
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| 1. **Contact Details** | | | | |
|  | **Name** | **Room** | **Phone** | **Email** |
| **Teacher** | Justin Blackwell |  |  | jblackwell@swin.edu.au |
| **Manager** | Andrew Roadknight |  |  | airoadknight@swin.edu.au |
| **Administration** |  |  |  | @swin.edu.au |

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| 1. **Delivery Overview Hours** | | | | |
| **Classroom** | **Online** | **Workplace** | **Directed Unsupervised Activities** | **Other** |
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| 1. **Unit Details** |

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| **A** | **Unit Code** | | ICTICT406 | | | | | | | | |
| **Unit Type** | | |  | **Core** |  | **Elective** | **Result** |  | **Graded** |  | **Ungraded** | |
| **Pre/Co Requisites** | | |  | | | | | | | | |
| **Description** | | | This unit describes the skills and knowledge required to design, build and test a graphical user interface (GUI) to specification.  It applies to individuals employed as programmers in a variety of fields who provide information and communications technology (ICT) support in small to medium enterprises (SMEs).  No licensing, legislative or certification requirements apply to this unit at the time of publication. | | | | | | | | |
| **Elements** | | **1** | Determine specification of GUI | | | | | | | | |
| **2** | Design GUI to specification | | | | | | | | |
| **3** | Build GUI to specification | | | | | | | | |
| **4** | Test and document GUI to meet specification | | | | | | | | |
| **5** |  | | | | | | | | |

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| **B** | **Unit Code** | | ICTPRG301 | | | | | | | | |
| **Unit Type** | | |  | **Core** |  | **Elective** | **Result** |  | **Graded** |  | **Ungraded** | |
| **Pre/Co Requisites** | | |  | | | | | | | | |
| **Description** | | | This unit describes the skills and knowledge required to create simple applications or games.  It applies to individuals with responsibility for creating applications or games and includes creating code, using programming standards, testing, and debugging.  No licensing, legislative or certification requirements apply to this unit at the time of publication. | | | | | | | | |
| **Elements** | | **1** | Apply language syntax and layout | | | | | | | | |
| **2** | Apply control structures | | | | | | | | |
| **3** | Code using standard algorithms | | | | | | | | |
| **4** | Test the code | | | | | | | | |
| **5** | Create an application or game | | | | | | | | |

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| **C** | **Unit Code** | | ICTPRG404 | | | | | | | | |
| **Unit Type** | | |  | **Core** |  | **Elective** | **Result** |  | **Graded** |  | **Ungraded** | |
| **Pre/Co Requisites** | | |  | | | | | | | | |
| **Description** | | | This unit describes the skills and knowledge required to prepare test plans, write test procedures or scripts according to test plans, and maintain test plans and scripts.  It applies to individuals who may be responsible for test plan preparation, execution, maintenance, and reporting of tests; as well as defect management in the software development life cycle.  No licensing, legislative or certification requirements apply to this unit at the time of publication. | | | | | | | | |
| **Elements** | | **1** | Determine testing need in development | | | | | | | | |
| **2** | Prepare test plan document | | | | | | | | |
| **3** | Write and execute test procedures | | | | | | | | |
| **4** | Review test results | | | | | | | | |
| **5** |  | | | | | | | | |

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| **D** | **Unit Code** | |  | | | | | | | | |
| **Unit Type** | | |  | **Core** |  | **Elective** | **Result** |  | **Graded** |  | **Ungraded** | |
| **Pre/Co Requisites** | | |  | | | | | | | | |
| **Description** | | |  | | | | | | | | |
| **Elements** | | **1** |  | | | | | | | | |
| **2** |  | | | | | | | | |
| **3** |  | | | | | | | | |
| **4** |  | | | | | | | | |
| **5** |  | | | | | | | | |

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| **E** | **Unit Code** | |  | | | | | | | | |
| **Unit Type** | | |  | **Core** |  | **Elective** | **Result** |  | **Graded** |  | **Ungraded** | |
| **Pre/Co Requisites** | | |  | | | | | | | | |
| **Description** | | |  | | | | | | | | |
| **Elements** | | **1** |  | | | | | | | | |
| **2** |  | | | | | | | | |
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| **4** |  | | | | | | | | |
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| 1. **Learning Resources** | |
| **Blackboard 9.1 - iLearn** | <https://ilearn.swin.edu.au/webapps/login/>  (additional learning materials, resources, assessments, quizzes etc can be access via the link) |
| **Books** |  |
| **Equipment/Materials** |  |
| **Other** |  |

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| 1. **Assessment Details** |  |  | |  | |
| **Assessment Task Title** | **Units**  **A,B,C,D,E,F,** | | **Mark\***  Graded units only | | **Due Date** |
| Prac 1 – SSR, Arrays/Lists, Functions | B,C | |  | |  |
| Prac 2 - SSR, Arrays/Lists, Functions, WPF | A, B, C | |  | |  |
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|  |  | |  | |  |
|  | **Total** | | **100** | |  |

**Decision Making Rules**

Every task must be completed satisfactorily to be assessed as competent in the unit.

*\* For graded units, competence must be demonstrated before a mark can be given.*

**Reasonable adjustment**

Students may request reasonable adjustment for assessment tasks.

Reasonable adjustment usually involves varying:

* the processes for conducting the assessment (eg: allowing additional time, varying the venue)
* the evidence gathering techniques (eg: oral rather than written questioning, use of a scribe, modifications to equipment)

However, the evidence collected must allow the student to demonstrate all requirements of the unit.

**Special Consideration**

Students can apply for Special Consideration where personal circumstances have adversely affected their task result or ability to undertake an assessment. A Special Consideration form can be completed prior to, but no later than 3 days after, the date of the assessment and submitted to the relevant Manager.

| 1. **Schedule** | | | |
| --- | --- | --- | --- |
| **Date** | **Week** | **Topic/activity/assessment** | **Units**  **A,B,C,D,E** |
|  | 1 | Input, Process, Output. UI vs Console | A,B,C |
|  | 2 | Variables, C# & Visual Studio | A,B,C |
|  | 3 | Selection | A,B,C |
|  | 4 | Algorithms, PseudoCode & Repetition | A,B,C |
|  | 5 | Nested Repetition | A,B,C |
|  | 6 | Arrays & Lists | A,B,C |
|  | 7 | Methods, Functions and Testing | A,B,C |
|  | 8 | WPF – Basic Components | A,B,C |
|  | 9 | WPF – Layouts | A,B,C |
|  | 10 | Introductory OO | A,B,C |
|  | 11 | Object Orientation cont’ | A,B,C |
|  | 12 | Inheritence | A,B,C |
|  | 13 | Inheritence – Assignment 1 | A,B,C |
|  | 14 | Polymorphism (Abstract & Virtual) | A,B,C |
|  | 15 | Polymorphism (Interfaces) | A,B,C |
|  | 16 | Assignment 2 | A,B,C |